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1638

RAW SEQUENCE LISTING                      DATE: 03/09/2001  
 PATENT APPLICATION: US/09/718,754A        TIME: 11:15:19

Input Set : A:\1189CORRSEQLIST.TXT  
 Output Set: N:\CRF3\03092001\I718754A.raw

ENTERED

4 <110> APPLICANT: Lappegard, Kathryn K.  
 5        Abbitt, Shane E.  
 6        Martino-Catt, Susan J.  
 7        Shi, Jinrui  
 8        Gordon-Kamm, William J.  
 9        Lowe, Keith S.  
 11 <120> TITLE OF INVENTION: Seed-Preferred Regulatory Elements and  
 12        Uses Thereof  
 14 <130> FILE REFERENCE: 1189  
 16 <140> CURRENT APPLICATION NUMBER: 09/718,754A  
 17 <141> CURRENT FILING DATE: 2000-11-22  
 19 <160> NUMBER OF SEQ ID NOS: 19  
 21 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 1247  
 25 <212> TYPE: DNA  
 26 <213> ORGANISM: Zea maize  
 28 <220> FEATURE:  
 29 <221> NAME/KEY: promoter  
 30 <222> LOCATION: (1)...(1247)  
 32 <400> SEQUENCE: 1  
 33    atcgtagata aagttggatt atacaatatc catttacaac taaatagaaa ccaattaatt        60  
 34    taaaaaacta aaaaaacott tatcacgcta caggagaaga gagcatcaac ttgctatttag        120  
 35    ttttatgcat ttaaacaccc ttccaacat cagcagtggt tgatagggtt aactgatact        180  
 36    aatatcttgt ctttaatact agcaccaact gataataatc ttccaacac atgttattat        240  
 37    ctattgttga ctttaataca tactaaatcc aagatatttag tagagatgtt agtatagatt        300  
 38    aaggtgatgt ttgaatgcac tagagctaat agtttagtagc taaaattagt tggagacatt        360  
 39    caaacacoot atcaattatt agttattttt agtaaatagg ttaatagtta gttagtatt        420  
 40    tataagctag ctttttttac tagcaatttt ttagccaact aacaattagt tttagtgtat        480  
 41    tcaaatatcc ctaagccgtt aagtgatgct ctttctagaa tcttaaccgt atgtggagac        540  
 42    aacattttca taggtgtact gtttaagtca ccgtcagtga taataatatt ttcacatgag        600  
 43    gtttcttaag caaacgccca gtgctaataa tttttacact agcgggctgc taaagaaaac        660  
 44    cgtccgtgct aaagatatat acactagcgg ttggtgaaca actgcctgtg aaaaaagccg        720  
 45    attcctacta gcccctagct tgcactggcg acataaaaaa cgtcagtga aatagctcta        780  
 46    ggatcgtaac tatagagctt ctatgtactt agtggttaga actgatattg tagtgcacca        840  
 47    agtgcgatt ttaattaaac caatactaaa tactagttaa taatactagt ggtctgaatt        900  
 48    cgatttttat agtaattgtt gcttgcaagc cgcaaataga gtaaacattc gtcgtcacag        960  
 49    aaatccacat tacatcaagg tccatggcgg ccggccacgt acccatccca cgcgtcgtg        1020  
 50    cggaggacac gtgttggtg accggacagt tggccgatca gacagtggac agaccggaca        1080  
 51    atagaagaag aagacgacga cggcggcggc accgccgagt aggtgcatgg tcacgctagc        1140  
 52    tgtagctttt tgcagagcgt cgtctgtaaa tacgtagccc ttccacaagc gaggcaagg        1200  
 53    gggagagagt atcgtagct agcagagaga gtgcgtagca actagca                      1247  
 55 <210> SEQ ID NO: 2  
 56 <211> LENGTH: 26  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Artificial Sequence  
 60 <220> FEATURE:

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61 <223> OTHER INFORMATION: Jipl forward primer
63 <400> SEQUENCE: 2
64   tcgggagaag tcactagcgg ggaact                               26
66 <210> SEQ ID NO: 3
67 <211> LENGTH: 27
68 <212> TYPE: DNA
69 <213> ORGANISM: Artificial Sequence
71 <220> FEATURE:
72 <221> NAME/KEY: primer_bind
73 <222> LOCATION: (1)...(27)
74 <223> OTHER INFORMATION: Jipl nested forward primer
76 <400> SEQUENCE: 3
77   gagcagggtt ctccgccatt gctagtt                               27
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 752
81 <212> TYPE: DNA
82 <213> ORGANISM: Zea mays
84 <220> FEATURE:
85 <221> NAME/KEY: promoter
86 <222> LOCATION: (1)...(752)
88 <400> SEQUENCE: 4
89   aagctttgat caaaagcgcc cgccacttct aaaggtcagg ggtcttgcgt tctgccctc        60
90   gtgcttcctt caaattcttg acctagtga tcaatttacg tacacctcag caaccgatgc        120
91   agccagtaag tatgatgagc acgattgtga cgtgttgggg tcatgggtcaa tggcaaccga        180
92   gcacgaattg gtagtgtcag cttttgtac acgtgatagc atttgattcg ttcatccaat        240
93   ttgaactgtt tgaacttatg tatagagaaa ttagtccaac tcatgtttaa taaatagtat        300
94   aaaacccatc gaatttctga attatgatag caggtatcca ttgtcatcgc tcagtcacag        360
95   aggcagccac tgccgacggg cgacggccga cggcctcca ttctgatccc ctctactcc        420
96   tatgctgcgg tccagcataa gttcgggaact tccggcaatc cgccggcgcc cgtcgggtca        480
97   aatcgcatct accgcggcta gaagctctct ctctctccct ccgatccggt ggggtccatt        540
98   tccttcaatt gtggcagtg cgtctctgaa ccctctataa atccccacc ccggacaccc        600
99   ttccccgacc acacgggtcca cacagcccaa caaaggagcg cggcgggccc tccttcttc        660
100  ctcccacttc tctcgcgagg cgctcgctta cctcgctcgc cattccgttc gacagggga        720
101  gcggcagtga gaaggaggag aattaaggca cc                               752
103 <210> SEQ ID NO: 5
104 <211> LENGTH: 30
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <221> NAME/KEY: primer_bind
110 <222> LOCATION: (1)...(30)
111 <223> OTHER INFORMATION: Milps3 forward primer
113 <400> SEQUENCE: 5
114   cggaagctct cgatgaacat ctgccttaa                               30
116 <210> SEQ ID NO: 6
117 <211> LENGTH: 1433
118 <212> TYPE: DNA
119 <213> ORGANISM: Zea mays
121 <220> FEATURE:

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122 <221> NAME/KEY: promoter
123 <222> LOCATION: (1)...(1433)
125 <400> SEQUENCE: 6
126 tcctaattctt caaataacca tctcaaaagt tttttaaaac atcttttgag gatatgtatc      60
127 ccatagccct agagcgctaa attgactact tttagtcgat taaaagggtat tagacatcct      120
128 tacaagtcct aagtatcaaa tcaccttcta tcggctatac acaactaacg gaagttatct      180
129 ctatgcacac taacttatgt cggtttcgcg atggcagatc aaaattagct aacttttggt      240
130 ggctaataag agcaattcca aaagaacgtg taaactaatc tcaaaacaga tattagttaa      300
131 gaatagtaat ttttcttact ccaacagttc cctcagtcct ccccaaaaaa ttaagcgttc      360
132 cgcattccaca gcctcctctc ggctgtatct tgggtgtggt catccctccc caatccattt      420
133 ctcaacgtat cagatcatcc accgcctacg acgactgtac agtttgcgtc acatatcaca      480
134 tttaaaggaa ctgttgaggc acccatoata attcactctt aaaaaatttt agcctgctct      540
135 caataatcaa ttgggggggt aaaattttta acatcctttc ggatctaata caacttatgg      600
136 aagttagcta gctctggctg cgctaaactc tgtcgatcgc ctattagcta atactccatc      660
137 tgtcccatca tataagggtat aaccaactct gattcaaaga ccaaaaatat acttaattgt      720
138 gtctatacca ctctcatgat gtacgtatgc atagaaagag cacatcttat attgtgqaac      780
139 aagaacaaaa aiatgggttac gccttatatt ataagacgta gaaatcaatg gtttacaata      840
140 gccagaataa gatgttttta tttatttctt atatagatgt ttttatttat ttcctatatg      900
141 tttcacataa gccttatatt gtgccgaaaa tttaggcaca cgtgccacga acgtctgaaa      960
142 tgtactccgc gcgtattacc atgcactacg acgtacgtag gagtatgtac gttgaaccaa      1020
143 gcacacatat atctctgaca cagtacaatg atatactaca acaacaacag tactgcccaa      1080
144 ttcattccatt ttcacgtttc atcttccgcg tgtgacaact cgatcggcca cgcacgcaga      1140
145 cgacgcagga gcagtaactc acagaatcct ccgccactcg tcacaccaac aggcgcgcgc      1200
146 tgggtgcgat gcattatgtg catgccatcg tccgtccctt ggctgcctc ggtagacggt      1260
147 agctagagta gtagcctgtg cttgttaccg ctggtcaaca catcgtagcc tcctatatct      1320
148 aacgtatcct cacacatcac aagaacgaca cacagaaacc agtagccact actccatoca      1380
149 ccacgagcga gcgagcgata accctagcta gcttcaggat ccagcgagag ccc      1433
151 <210> SEQ ID NO: 7
152 <211> LENGTH: 20
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <221> NAME/KEY: primer_bind
158 <222> LOCATION: (1)...(20)
159 <223> OTHER INFORMATION: Lec 1 prom. forward probe
161 <400> SEQUENCE: 7
162 acaccacgag cgcgcgataa      20
164 <210> SEQ ID NO: 8
165 <211> LENGTH: 20
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <221> NAME/KEY: primer_bind
171 <222> LOCATION: (1)...(20)
172 <223> OTHER INFORMATION: Lec 1 prom. reverse probe
174 <400> SEQUENCE: 8
175 tgggtggtggt gcggtagcat      20
177 <210> SEQ ID NO: 9
178 <211> LENGTH: 695

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179 <212> TYPE: DNA
180 <213> ORGANISM: Zea mays
182 <220> FEATURE:
183 <221> NAME/KEY: terminator
184 <222> LOCATION: (1)...(695)
186 <400> SEQUENCE: 9
187  tacctagttc gtacgtcgtt cgacttgagc aagccatcga tctgctgata tgaacgtacg      60
188  ctgtattgta cacgcatacga cgtacgtatc gccggctagc tctcctgttt aagttgtact      120
189  gtgattctgt cccggccggc tagcaactta gtatcttctc tcagtctcta gtttcttagc      180
190  agtcgtagaa gtgttcaatg cttgccagtg tgttgtttta gggccggggg aaaccatccg      240
191  atgagattat ttcatagcacg ctttttagac tgacgactgt tcgtgtgtgt cttctgcgca      300
192  gttccgctcc tagcacaatt atatcctcct tgatgatcgt ttaacgcaac agtcttctct      360
193  ggaggtctag acctagcgga tcttttgttg tactcccttc tatacgtaca tgcatactac      420
194  acgtacgtac gccggcggtg cggcagctac atattcgtcg ttcgagtgtg atgcattggg      480
195  tgtctttaa gccccttcgtc gttctagctg ctggcctgct gctatagcct gtaggtgagg      540
196  tgttcgtggc ttgcgacgcg cgggaggaaq cacgacggar ggtggcggcg catgttctly      600
197  actctggact attgcgcgta ggcgcgtgac caagttccac ggtggcgtgc gcggctgcag      660
198  cgaggcgccc gcgacaagtg ccggcgatcc cgcag                                     695
200 <210> SEQ ID NO: 10
201 <211> LENGTH: 45
202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <221> NAME/KEY: primer_bind
207 <222> LOCATION: (1)...(45)
208 <223> OTHER INFORMATION: Lecl term. forward primer
210 <400> SEQUENCE: 10
211  gtcgacagat ctgttaacct agttcgtacg tcgttcgact tgagc                                     45
213 <210> SEQ ID NO: 11
214 <211> LENGTH: 36
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
218 <220> FEATURE:
219 <221> NAME/KEY: primer_bind
220 <222> LOCATION: (1)...(36)
221 <223> OTHER INFORMATION: Lecl term. reverse primer
223 <400> SEQUENCE: 11
224  gggccccgtg cggcaacaaa aatagacctg acctca                                     36
226 <210> SEQ ID NO: 12
227 <211> LENGTH: 29
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <221> NAME/KEY: primer_bind
233 <222> LOCATION: (1)...(29)
234 <223> OTHER INFORMATION: Jipl forward nested primer
236 <400> SEQUENCE: 12
237  cctttatcac cgtacaggag aagagagca                                     29
239 <210> SEQ ID NO: 13

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240 <211> LENGTH: 26
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <221> NAME/KEY: primer_bind
246 <222> LOCATION: (1)...(26)
247 <223> OTHER INFORMATION: Jipl reverse nested primer
249 <400> SEQUENCE: 13
250   tattgtccgg tctgtccact gtctga                26
252 <210> SEQ ID NO: 14
253 <211> LENGTH: 28
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <221> NAME/KEY: primer_bind
259 <222> LOCATION: (1)...(28)
260 <223> OTHER INFORMATION: Milps3 nested forward primer
262 <400> SEQUENCE: 14
263   gagctcctcc acgcgatcaa aagcgccc                28
265 <210> SEQ ID NO: 15
266 <211> LENGTH: 37
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <221> NAME/KEY: primer_bind
272 <222> LOCATION: (1)...(37)
273 <223> OTHER INFORMATION: Milps3 nested reverse primer
275 <400> SEQUENCE: 15
276   cccgggccat ggtcatgcct taattccctc ctttctc        37
278 <210> SEQ ID NO: 16
279 <211> LENGTH: 29
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <221> NAME/KEY: primer_bind
285 <222> LOCATION: (1)...(29)
286 <223> OTHER INFORMATION: Lecl promoter forward nested primer
288 <400> SEQUENCE: 16
289   tcgaggtcga cggtatcgat aagcttcct                29
291 <210> SEQ ID NO: 17
292 <211> LENGTH: 49
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial Sequence
296 <220> FEATURE:
297 <221> NAME/KEY: primer_bind
298 <222> LOCATION: (1)...(49)
299 <223> OTHER INFORMATION: Lecl nested reverse primer
301 <400> SEQUENCE: 17
302   gtcgacccat gggctctcgc tggatcctga agctagctag gggtatcgc        49

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